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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,879	03/22/2004	Horst W. Kwech	1883.2	9872

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EXAMINER	
ADDISU, SARA	
ART UNIT	**PAPER NUMBER**
3722	

DATE MAILED: 08/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/805,879	KWECH ET AL.	
	Examiner	Art Unit	
	Sara Addisu	3722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25 and 37-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25 and 37-47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3/22/04
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the amendment filed 4/19/06. New claims 37-47 have been added. Currently, claims 1-25 and 37-47 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-25 and 37-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci et al. (USP 6,447,220), in view of Kwech (USP 4,758,121) and further in view of Applicant Admitted Prior Art (AAPA).

RICCI ET AL. teaches a multi function (boring/facing) apparatus that is useful for the machining of pipe, comprising a mast (12) comprising an internal mast feed screw (16) and a mast feed screw servomotor (18: electrically powered) for turning said mast feed screw ('220, figure 1 and Col. 3, lines 24-35 and lines 60-64). RICCI ET AL. also teaches a non-rotary housing (20) coupled to and moveable along said mast (12), a rotary housing (24) positioned adjacent to said non-rotary housing (28) and rotatably coupled to said mast and moveable along said mast ('220, Col. 3, line 65 through Col.

4, line 7). Regarding claims 2-4, RICCI ET AL. the rotation of the rotary housing (24) being caused by the drive motor (30 or 32) having gear transmission and the drive motor could be hydraulically or electrically powered ('220, Col. 3, lines 54-59). Furthermore, RICCI ET AL. teaches an adjustable tool mechanism affixed at said rotary housing (24), said adjustable tool mechanism having a slide (264) supporting a tool bit and a cutting tool adjustment shaft (280) adapted for radial adjustment of the bit ('220, figure 6). RICCI ET AL. also teaches a drive means including an AC (electrically powered) variable gearbox servomotor ('220, Col. 11, lines 24-25). Regarding claim 16, RICCI ET AL. fails to teach a hydraulically powered gearbox servomotor. However, AAPA teaches that it is understood by those of ordinary skill in the art that a motor could be powered hydraulically, electrically or pneumatically (Specification, page 9, paragraph 28 and page 10, paragraph 33, lines 1-3). Regarding Claims 20 and 21, RICCI ET AL. teaches mounting brackets (22 & 23) for securing the apparatus within a pipe ('220, Col. 3, lines 40-47). RICCI ET AL. also teaches a feed nut (92) that is adapted to cooperate with the threads of the feed screw (16). Regarding claims 46 and 47, RICCI ET AL. teaches chuck body (22, 23) mounted perpendicular to the shaft and coaxial with the pipe/workpiece to be machined. Although RICCI et al. teaches gear reduction and does not teach the servo motor having one-to-one geared communication with said cutting tool adjustment shaft, it would have been obvious to one having ordinary skill in the art to choose whatever gear ration depending on the application, to get the desired torque output.

However, RICCI ET AL. fails to teach a computer that is in communication with the mast feed screw servomotor and said gearbox servomotor. RICCI ET AL. also fails to teach chuck body having self-centering means for securing the apparatus within a pipe.

KWECH teaches an apparatus that is useful for the machining of pipe, comprising a mast (12) comprising an internal mast feed screw (74) and a mast feed screw servomotor (78) for turning said mast feed screw ('121, figure 2 and Col. 4, lines 28-36). KWECH also teaches a rotary housing (14), a tool slide (32) and servomotor (81) for radial movement of the tool slide ('121, figure 1 and Col. 4, lines 37-54). Furthermore, KWECH teaches the cutting tool having two axes of movement (the axial radial position) provided by computer controllable servomotors (121, Col. 6, lines 30-34 and Col. 2, lines 51-55). Additionally, AAPA teaches that it will be understood by those of ordinary skill in the art that a controller (such as a computer) may run a program or respond to real-time operator input (Specification, page 9, paragraph 29). Regarding claims 20-22 position and and 24, KWECH teaches chuck (10) of a self-chucking and self-centering construction and having a plurality of radially movable blades, which move outwardly into engagement with the inner surface of the wall of the pipe by means of hydraulically controlled mechanism (54) ('121, Col. 3, lines 21-25 and line 58 through Col. 4, lines 10). Regarding claim 23 ands 25, AAPA teaches that self-centering mechanisms, which are known to persons having ordinary skill in the art may be controlled, for example, by electric, hydraulic, or pneumatic motors (Specification, Page 14, paragraph 46, lines 6-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate a computer that is in communication with the mast feed screw servomotor and gearbox servomotor of RICCI ET AL's invention, as taught by KWECH because AAPA teaches that it will be understood by those of ordinary skill in the art that a controller (such as a computer) may run a program or respond to real-time operator input (Specification, page 9, paragraph 29). It would have also been obvious to one of ordinary skill in the art at the time of the invention was made to include a chuck body having self-centering means for securing RICCI ET AL's invention within a pipe, as taught by KWECH because, AAPA teaches that self-centering mechanisms are known to persons having ordinary skill in the art (Specification, Page 14, paragraph 46, lines 6-9).

Response to Arguments

Applicant's arguments filed 4/19/06, page 13, last paragraph (that Ricci et al. does not teach one-to-one communication between the servomotor and the tool adjustment mechanism), with respect to the rejection(s) of claims 1 and 10 under 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the fact that it it would have been obvious to one having ordinary skill in the art to choose whatever gear ration depending on the application, to get the desired torque output.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Addisu at (571) 272-6082. The examiner can normally be reached on 8:30 am - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Addisu
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SA
8/14/06

Monica S. Carter
MONICA CARTER
SUPERVISORY PATENT EXAMINER